

**ICFA Agri Start Ups Convention  
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# **Presentation**

**By**

**Ramesh Deshpande  
India Agricultural Group  
Washington DC**

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# India Agriculture Today

- **With 1.3 billion, India is now the World's fourth largest economy – a significant achievement of our time.**
- **In particular, India has witnessed a landmark revolution in agriculture transforming the nation from its chronic dependence on grain imports during fifties and sixties, to a net exporter of food, especially certain types of grains.**
- **During the past over five decades, with the adoption of green revolution technology, India's food production increased 3.7 times while the population increased by 2.55 times. The net result was 45% increase in per person food production.**
- **Agricultural growth in India in turn led to an impressive progress in human development indices, particularly with life expectancy doubled, literacy rate quadrupled, health conditions notably improved and rural poverty rates significantly declined. Malnutrition especially among the rural poor including children remains a matter of concern.**

# India Agriculture: Yes, We Know the Problems!

- Despite major transformation from dependence on food aid to becoming a consistent net food exporter, India's agriculture has underperformed relative to its potential.
- Maintaining India's hard-won food security and achieving shared food prosperity is still a challenge. On the one hand, there exists widespread under nourishment and other hand, record production levels of food and overflowing stocks.
- Green revolution technologies which result in deterioration of soil and water quality and environmental hazards need to be modified to promote sustainable agriculture based NRM technologies.
- Across India, diversification of higher value crops and livestock products has proceeded too slowly – which has adversely affected overall growth in agriculture; and
- the Lack of value addition and supply of high value products has not kept pace with growing demand generated by increasing incomes in urban sector;

# INDIA AGRICULTURE: CONSTRAINTS TO GROWTH

Slow growth in agriculture relative to the overall growth can be attributed to number of factors including the following:

- Slow generation of new technologies – after the stabilization of green revolution technologies.
- Poor dissemination of existing technologies;
- Weak and inefficient institutions serving agriculture (covering Agricultural Research, Education, Extension, Credit and Marketing);
- Poor governance or management of the sector at macro and micro levels;
- Budgetary constraints and low private sector investments; and above all
- Rainfall shocks that affect production and productivity.

While a lot of work is underway, if farmer incomes must double by 2023, these constraints must be systematically addressed.

# India Agriculture

## Agriculture Growing Too Slowly Relative to Other Sectors (source: The World Bank)

Sectoral trend growth rates by period (%/yr) Sector	1960/61–1968/69 (Pre green revolution)	1968/69–1975/76 (Early green revolution)	1975/76–1988/89 (Wider Technology Dissemination)	1988/89–1995/96 (Period of Diversification)	1995/96–2004/05 (Post reform period)	2004/05–2010/11 (Period of recovery)	2011/12 - 2015/17 (Period of stress due to droughts)
Agric. and Allied Activities	1.03	1.98	2.42	3.24	2.35	3.31	1.6
Agriculture*	0.70	1.93	2.71	3.21	2.30	3.37	..
<i>Crops (VOP)</i>	1.11	1.90	2.56	2.64	1.88	3.01	..
<i>Livestock (VOP)</i>	0.40	2.69	4.89	4.12	3.43	4.29	..
Forestry and Logging	3.70	2.01	-1.77	0.74	2.05	2.25	..
Fishery	3.91	4.19	3.45	7.37	3.28	4.42	
Nonagricultural	4.90	3.67	5.23	5.91	7.05	9.68	
All sectors	3.19	2.99	4.25	5.14	5.95	8.57	6.25

# **NDA GOVT'S RECENT INITIATIVES TO ADDRESS RISKS & CONSTRAINTS TO GROWTH IN AGRICULTURE**

**Since 2014, GOI has launched several new programs and modified the old ones over the past three years including the following:**

- PM's Fasal Bima Yojana;**
- Pradhan Mantri Krishi Sinchai Yojana;**
- Soil Health Card issue and improved soil nutrient management,**
- Paramparagat Krishi Vikas Yojana;**
- eNAM**
- JLG Financing;**
- Neem Urea; and**
- Mobile Aps for Farmer,**

**However, more needs to be done if agricultural growth must accelerate and help increase farmer incomes. Agriculture faces many risks and requires subsidies and disaster relief causing much burden on already stretched fiscal resources.**

# **GOI'S NEW POLICY INITIATIVES**

## **FOCUS ON RISK MANAGEMENT IN AGRICULTURE**

- **Per Drop More Crop, More efficient use of water, water conservation and micro irrigation;**
- **Efficient supply and use of three critical inputs: seeds, fertilizers and pesticides; Use of new Technologies: GM and other modern technologies; R&D in Agriculture;**
- **Shift into High Value Commodities;**
- **Increase share of Animal Husbandry in value addition – already constitutes over 35% of GDP;**
- **Bring Green Revolution to Eastern States;**
- **Ensure Remunerative Prices to Farmers through MSP; Concern about farmers in states where no procurement with MSPs. Ensuring a higher price for farmers relative to prices paid by Consumers.**

# **HON. PRIME MINISTER'S VISION OR STRATEGY TO DOUBLE FARMER INCOMES BY 2022**

**Hon. Prime Minister's Vision to Double Farmer Incomes by 2022 can potentially lay the foundation for accelerated restructuring, revitalization and transformation of India's Agriculture and its sustained growth leading to increased incomes to farmers.**

**NITI Aayog's Governing Council, has accordingly endorsed in April 2017, a Three Year Action Agenda (2017-18 to 2019-20) that focuses primarily on Economic Transformation of major sectors including Agriculture. In Agriculture, the economic transformation is proposed to be accomplished through following for key initiatives.**

- Reform Agricultural Market Policies and Market Interventions – including MSP procurement, to ensure that farmers receive remunerative prices;**
- Improve productivity of both land and water, which remains low for many crops when compared to other countries – also there are regional variations in productivity that must be addressed;**
- Accelerate land reform – Amend old tenancy laws; introduce land leasing (and contract farming?); enable farmers to lease or sell their lands or borrow loans against land;**



# **GOI'S NEW POLICY INITIATIVES**

## **FOCUS ON RISK MANAGEMENT IN AGRICULTURE**

- **Improve relief measure in the event of natural disasters.**
- **And last but not the least, encourage Start Ups educated youth – who are filled with ideas, passion, and innovation, to launch newer kinds of technology and business models that will accelerate transformation of India's agriculture to a more efficient and productive business bringing more income to farmers and quality products to consumers at affordable prices;**
- **Start ups turning into viable commercial businesses are expected to fill the missing links in the agricultural value chain and delivering efficient product technologies and services to farmers on the one hand and consumers on the other.**

# **GOI'S NEW POLICY INITIATIVES**

## **FOCUS ON RISK MANAGEMENT IN AGRICULTURE**

- We are already seeing many innovations in areas such as ICT applications to farm automation; from weather forecasting to drones; from input retailing to equipment renting; to online vegetable marketing.**
- On the first day of this Convention, we heard several innovators or entrepreneurs of their experience in agri-start ups, food start ups, technology start ups, marketing start ups and a range of challenges that they faced in mobilizing farmers and clients or consumers, raising seed capital, product selection or development and marketing.**
- What did we learn? An entrepreneur is a unique character who knows his or her business goals; has an early client base, takes family and friends into confidence; and believes that risk means an opportunity!**

# **GOI'S NEW POLICY INITIATIVES FOCUS ON INNOVATIONS & INVESTMENTS IN AGRICULTURE**

- **GOI and state governments are currently implementing over 50 programs to support entrepreneurs in agriculture and other sectors. Some major schemes are sector-agnostic which means that these schemes provide access to innovators in agriculture. Notable among the start up support schemes are**
  - **Skilled India;**
  - **Start Up India;**
  - **Stand Up India;**
  - **Mudra (Micro Units Development Refinancing Agency);**
  - **Udaan**
  - **Venture Capital Assistance**
  - **Credit Guarantee Scheme**

# **GOI'S NEW POLICY INITIATIVES FOCUS ON INNOVATIONS & INVESTMENTS IN AGRICULTURE**

- **Raw Material Assistance Scheme**
- **Regeneration of Traditional Industries**
- **Single Point Registration Scheme for MSMEs;**
- **Infrastructure Development Scheme;**
- **MSME Market Assistance Scheme;**
- **Credit-linked Capital Subsidy Scheme;**
- **Bank Credit Facilitation Scheme;**
- **Atal Incubation Centers;**
- **(NABARD) Dairy Entrepreneurship Development Scheme;**
- **(SIDBI) Make in India Soft Loan Window;**
- **(SIDBI) Start Up Assistance Scheme;**
- **(SIDBI) Growth Capital & Equity Assistance;**
- **Promoting Innovations in Individual Start Ups and MSMEs; and**
- **Rapid Grants for Young Investors.**

**The 2018 budget provides Rs. 10,000 crores to provide seed capital for new Start Up. We hardly see any evaluation reports on Government programs.**

# How Successful is Government in Funding Start Ups

- **No systematic evaluation of government-assisted start ups is available. Anecdotal evidence says that some 90-95% start ups with initial funding from government fail within 1 to 3 years– clearly an area of grave concern! Can the government funded system do better? What are the options – a topic for further inquiry – in terms of the institutional capacity to assess the risks involved in funding start ups.**
- **Basically, what private sector venture capitalist do is to deeply look at the Risks and Rewards in a Start Up before committing any funds? They ensure that that the start up is designed to solve a problem “where the solution are not obvious and success is not guaranteed (Neil Blumenthal, cofounder and co-CEO of Warby Parker) and that the startup has an ability to grow and scale up very quickly. It is this focus on growth that is unconstrained differentiates startups from small businesses. “A restaurant in one town is not a startup, nor is a franchise a startup”.**
- **This involves identifying risks and opportunities, determine livelihood (or probability) and impact of risks; and potential responses. The issue is whether government-sponsored programs rigorously apply this approach to financing start up?**

# Financing Start Ups: Connecting with Banks, FIs and VCs

- 1. India's Financial Markets & Venture Capital: VC business, though growing, is still very small relative to potential;**
- 2. PSBs and NPAs: Huge NPAs. Major PSB funding of Agri Start Ups, which involves much risk, is at this time uncertain;**
- 3. Government Financial Intermediaries: NABARD and SIDBI: NABARD and SIDBI need to go for increased Project Finance including funding of start ups. Can RIDF be used as a window for venture capital with partial funding by GOI budget to cover the risk factor?**
- 4. What private commercial banks which are usually risk averse, can do in funding Start Up? Coops unlikely to enter this field**
- 5. Role of RBI as a Regulator, Prudential Supervisor of the banking system can do? Strengthening of Lead Bank Scheme.**
- 6. Need a Policy Framework – with government playing a supportive role in conjunction with banks and not in isolation!**

## **SUGGESTED POLICY & PROGRAM ACTIONS**

### **NABARD OPERATIONS: ISSUES RAISED BY IAG**

- **Deepen agricultural strategy/sector analysis in NABARD's annual state-level credit plans;**
- **Expand Term Finance/Project Finance for Value Chain Development in Agriculture;**
- **Strengthen Risk Management Framework for Agriculture and Rural Finance;**
- **NABARD should play greater role in Climate Change Adaptation and Mitigation Projects; and**
- **GOI should diversify RIDF Scope and Operations within improved risk management framework**

# SUGGESTED POLICY & PROGRAM ACTIONS

## Other Priority Areas for NABARD

- **Scale Farming.** In the context of expanding urbanization and outflow of rural labor, NABARD should aggressively promote scale farming, using CA technologies in crops and horticulture, and genetic improvement of livestock. NABARD need to promote and fund relevant pilots to develop broader strategies and programs to accelerate transformation of India's rural/agricultural sector;
- **Agricultural Pollution.** NABARD should increase investments in projects for recycling agricultural bio waste to help reduce GHG emissions and promote efficient generation of renewable energy.
- **Farming Systems Approach.** NABARD needs to encourage farming communities to shift from crop-specific technologies and move to a farming systems approach using principles of Conservation Agriculture. Current efforts in this regard seem inadequate both from research and funding angles. Take note of what China is doing in this area.
- **Value Addition.** Without massive investments in value addition, Hon. PM's vision of doubling farmer incomes by 2022 is unlikely to be met. Currently, value addition investments are taking place on a scattered or ad hoc basis. There is not enough area-specific or sector-specific project identification and preparation work going on in most states. Should not NABARD, a development bank, take a lead in this area?



# Making Rural Financial Intermediation Viable

- **Rationalize Interest Rate Subsidies.** Current interest rate and other subsidies need to be reformed. Interest rate subsidies and restrictions on relative spreads allowed for commercial and cooperative banks tend to discourage them from lending to farmers and increase their losses and NPAs. Replace interest rate subsidies by direct cash transfers to low income farm families.
- **Eliminate Reverse Incentives.** Existing subsidies, especially those for fertilizers, result in encouraging farmers to stick to crop-specific, highly polluting, crop-specific green house technologies and discourage farming systems approach using the principles of NRM and Conservation Agriculture. Farm subsidy programs need to be rationalized or eliminated to promote climate friendly agricultural technologies.
- **Establish Risk Management Framework for Agriculture Finance.** Except for crop insurance, the coverage of which is limited, there does not exist a comprehensive risk management framework for agricultural lending by banks and commercial banks. Frequent resort to loan rescheduling and write off. NABARD/RBI need to work on this aspect detailing responsibilities of government agencies responsible to assist farmers to manage farming risks.